

# Plant Dermatitis in California

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So COMMON is poison oak dermatitis in California that it tends to obscure the fact that a number of other indigenous plants also may cause dermatitis of a kind that could be mistaken for reaction to poison oak.

I have observed cases of dermatitis caused by contact with all the plants dealt with in this communication, and in all instances the diagnosis was established by patch testing.

## Algerian Ivy

Algerian ivy is so commonly used in California as a ground cover that a morphological description is not necessary. There are dozens of varieties which are nothing more or less than miniatures with slight variations in leaf form. The morphologic features, modes of contact and means of treatment already have been described in detail.<sup>5,6</sup> Almost invariably it will be found that the patient having the disease cut back a growth of the ivy a day or two before the onset of dermatitis. Cutting back Algerian ivy will usually be necessary only in February, March or April, their period of rapid growth, after which they go into a slowly growing semidormant stage. If this plant is the cause of the skin eruption, reaction to a patch test with juice from crushed leaves will occur within 48 hours.

## Philodendron

The common house plant *philodendron* has been reported to cause dermatitis. Exposure occurs when the victim washes, oils or plucks the leaves. The eruption which occurs may be mild or severe. It is characteristic of philodendron dermatitis that the attacks have no relationship to season, since the plant grows indoors.<sup>4</sup> For this reason dermatitis from this cause frequently is not diagnosed, the patient having numerous perplexing episodes. Once the cause is suspected and proved by means of a patch test, the patient can avoid the disease simply by avoiding contact with the plant.

*Diffenbachia*, a common house plant closely related to philodendron, may also cause dermatitis.

## Oleander

Oleander causes dermatitis if crushed leaves come into contact with the skin of persons who have been made allergic by previous exposure. Usually the victims are children who have been playing around the

• A number of plants indigenous to California can cause contact dermatitis similar to that caused by poison oak—philodendron, oleander, fig family, castor bean, chrysanthemum family, Chinese rice paper plant and several others.

Patch testing can be used to prove a suspected diagnosis.

In some occupations dermatitis from one or another of these agents is more or less common.

shrubs. Oleander poisoning due to eating the leaves also occurs primarily in children. Since oleander is not deciduous it may produce dermatitis at any time of the year. Patch testing will confirm the diagnosis when suspected.

## Fig Family

Fig trees and rubber trees belong to the *Ficus* genus of plants. All members of this family have a milky sap which is commonly called latex. Theoretically all members of this family could cause dermatitis, since rubber, which is derived from latex, is one of the commoner causes of contact dermatitis. However, the degree to which they cause trouble is limited by the fact that most of them are rarely handled or trimmed. These plants have a special interest for dermatologists because they may sometimes induce a photodermatitis in addition to or instead of ordinary contact dermatitis.

The two most common offenders in this group are the ordinary fig tree and *Ficus repens*, a small-leaved ground cover. The sap from either may cause dermatitis or photodermatitis. One should remember, in patch testing for sensitivity to these plants, to expose the patch test area to sunlight if the response should be negative after 48 hours.

## Castor Bean

The castor bean plant is used in landscaping but also grows wild. The beans are poisonous. Because of their bright color at certain times of the year, children are attracted to them and become poisoned by eating them. Dermatitis results when juice from the leaves or stems gets on the hands or when the beans are held in the hand. This plant may cause dermatitis at any time of the year.

## Primrose Family

There are many varieties of primrose plants, any of which may cause dermatitis. The most frequent offender is *Primula obconica*.

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## Chrysanthemum Dermatitis

Chrysanthemums, asters, Shasta daisies, rainbow daisies and other types of daisies all belong to the same family of plants. Most of them have been reported to have caused dermatitis under certain conditions. Since most of them emit a pollen, asthma and hay fever as well as dermatitis may occur in persons who are sensitive to them. Dermatitis, asthma and hay fever from these plants are occupational hazards in the flower industry. Seven of 20 florists whom I interviewed were allergic in some way to one or all of this group of plants. In clinical practice chrysanthemums cause the most trouble. Usually dermatitis from this cause comes in the late fall and early winter, which is the blooming season. Since the blooms emit a pollen, the eyelids may be the first or even the only site of involvement. This may be the clue—eyelid dermatitis occurring in late fall—that leads to the diagnosis of sensitivity to chrysanthemum. Many patients will have dermatitis elsewhere, sometimes even over the entire body, from contact with chrysanthemum plants or pollen. The diagnosis may be confirmed by means of a patch test.

## Chinese Rice Paper Plant

Chinese rice paper plant, a popular ornamental shrub, may cause severe dermatitis. The toxic substance in this case is a heavy yellow pollen produced by the plant in the fall and winter months.

## Miscellaneous Group

I have seen or have heard of individual cases of dermatitis from the following causes: *Dichondra*,<sup>12</sup> *magnolia*,<sup>8</sup> *century plant*,<sup>11</sup> *tea roses*,<sup>1</sup> *greasewood*<sup>2</sup> and *Wigandia caracasana*.<sup>3</sup> *Encelia californica*, a wild shrub with which I am not familiar, also has been reported to cause dermatitis.<sup>10</sup>

## INDUSTRIAL ASPECTS

Persons who work as nurserymen, florists, horticulturists or gardeners may have occupational dermatitis from contact with the following plants: *Diffenbachia*, *breakfern*, *chrysanthemums*, *asters*, *daisies*, *philodendron*,<sup>7</sup> *Algerian ivy*, *primroses*, *daffodils*, *poinsettias*, *Ficus repens* and *century plants*. In Los Angeles, "grevillea poisoning" is well known among electric power companies whose workers have to protect their lines and among men cutting Australian silk oak trees (*Grevillea robusta*) for the streets and park departments.<sup>9</sup> Persons engaged in the manufacture of or use of castor bean meal (a fertilizer) or pyrethrum (an insecticide extracted from chrysanthemums) are subject to occupational dermatitis from handling these products.

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